

REMARKS

Claims 1-8 are pending.

Claims 1-8 are rejected.

Claims 9-12 are withdrawn.

Claims 13 and 14 are new.

Claim 1 is written because the term “or” was used in the claim. The claim, as amended, recites an “at least one of” clause instead.

Claims 5 and 6 are amended to eliminate the ECC language from the claims that the Examiner objected to. New Claims 13 and 14 are claims which recite the term “ECC” as being Error Correction Code blocks.

No new matter was entered in view of these amendments.

ARGUMENTS

I. 35 U.S.C. 112, Second Paragraph Rejection of Claims 5-6

The Examiner rejected Claims 5 and 6 under 35 U.S.C. 112, second paragraph as failing to set forth an indefinite term “ECC”. This term was removed from Claims 5 and 6 via amendment. Applicants therefore assert that this rejection is overcome in view of such an amendment.

II. 35 U.S.C. 102(e) Rejection of Claims 1-8

The Examiner rejected Claims 1-8 under 35 U.S.C. 102(e) as being anticipated by Millikan et al. (U.S. Patent Application NO. 2003/0172079, hereafter referred to as ‘Millikan’). Applicants disagree with this ground of rejection.

Rejection to Claim 1

- Fig 4, element 92 of Millikan purportedly discloses "indicating within the database file, as a last written segment that segment within the area to which data records were last written". This is respectfully traversed. Elements 92 of Fig 4 are "entries", multiples of which are contained in a "segment" 90, see [0037]. "Each entry 92 in segments 90 corresponds to an audio file and includes the genre (...) the artist name (...) and audio track name (...)" [0037]. No mention is made in Millikan, that any of these entries were to indicate "that segment to which data records were last written".
- 0029], lines 4-10, of Millikan purportedly disclose "writing a specific data record of a specific type that is to be written to the database, into the next available segment or segments after the last written segment within the area dedicated to the specific type". This is respectfully traversed. In the quoted passage, the only disclosure related to writing is "if the audio files are burned on to a CD, the presort is also burned onto the CD". This does in no way specify, where on the CD the presort is being written to, only that it is being written together with the audio files. The quoted passage does also not contain the concept of data records being of a certain type, and areas being dedicated to writing records of a certain type.
- [0042] of Millikan purportedly discloses "continuing, whenever during the writing the end of the area has been reached, the writing at the first available segment of the area". This is respectfully traversed. The quoted passage of Millikan is not related to writing data records, but to scanning - in a particular desired order - audio files in a directory structure, and generating proxy values therefrom. The quoted passage of Millikan does not contain in any way a notion of "wrap around" as expressed in the purportedly related claim element.

Rejection to Claim 2

- Millikan purportedly discloses "a method for modifying a database file organized in segments and stored on a storage medium of limited rewritability". This is respectfully

traversed. Millikan exclusively considers CD media, which after burning, have no further rewritability. Accordingly, Millikan does not consider "modifying a database file" (emphasis added), but only its creation and storage (burning) on the CD together with the AV files.

- [0043], lines 14-18 of Millikan purportedly disclose "modifying the read data record". This is respectfully traversed. The quoted passage discloses activities of "position the laser beam", "read the compressed audio data files ...", "transfer the data", "store (...) this data", "read the audio data from memory", "decompress the audio data", "generate and provide (...) audio signals"; none of which relates to any kind of modifying.
- [0043], lines 18-20 of Millikan purportedly disclose "obtaining a first write address information indicating a segment within the area to which a data record of the specific type was last written". This is respectfully traversed. The quoted passage of Millikan discloses "The CPU may store some or all of this data in memory and then read the audio data from the memory". It is respectfully reminded, that in Millikan, the "memory 114" is different from the "CD 71" in the "CD loader 118", see the beginning of paragraph [0043]. Also, the quoted passage of Millikan does not know the notion of a "write address information indicating a segment to which a data record was last written". With other words, the quoted passage is agnostic to the concept of a "write pointer" expressed therein.
- [0044] of Millikan purportedly discloses "forwarding the first write address information so that it indicates a next segment within the area which contains unused space". This is respectfully traversed. The quoted passage of Millikan discloses "To use the system, a user opens the disk drive and control mechanism in accordance with conventional techniques and places a CD containing audio files, the metadata presort file, and file system information therein. Using controls and display, the user can select a specific file to play or, as discussed below, select a presorted arrangement of files to play". With other words, the quoted passage of Millikan relates to "using a system", "opening a disk

drive", "placing a CD therein", "using controls and [a] display", "select[ing] a file", and "play[ing a file]". None of these is related to notions of "write address information", "unused space". Additionally, as explained above, Millikan exclusively considers CD media, which after burning, have no further rewritability. Hence the claim 2 steps of "reading", "modifying" and "writing" are technically impossible on the CD player system of Millikan.

- [0045] of Millikan purportedly discloses "writing the modified data record to segments starting at the segment as indicated by the first write address information". This is respectfully traversed. The quoted passage of Millikan discloses "(...) the user can use input controls to cause the CPU transmit the listing of the various sorting criteria from the vector sort table to the display, Once displayed, via controls, the user can select one of the sorting criterion and the audio files will be played in the order corresponding to the selected sorting criterion. if the selected sorting criterion includes file names, then the player's CPU simply plays the files in the order specified using the file names". With other words, the quoted passage of Millikan relates to "using input controls", "caus[ing] the CPU [to] transmit the listing (...) to the display", "select[ing] one of the sorting criterion", and "play[ing] the audio files". None of these is related to notions of "writing modified data records" back to an "area within the database file" (see claim 1).

Rejection to Claim 3

- [0044] of Millikan purportedly discloses "in case that an address information about the payload data record is contained in a control block within the control area, reading, from the control area, the control block". This is respectfully traversed. The quoted passage of Millikan discloses "To use the system, a user opens the disk drive and control mechanism in accordance with conventional techniques and places a CD containing audio files, the metadata presort file, and file system information therein. Using controls and display, the user can select a specific file to play or, as discussed below, select a presorted arrangement of files to play". With other words, the quoted passage of Millikan relates to "using a system", "opening a disk drive", "placing a CD

therein", "using controls and [a] display", "select[ing] a file", and "play[ing a file]"".

None of these is related to notions of "address information", "payload data record", "control block within the control area", and "reading the control block" as expressed in the purportedly related claim 3 elements.

- [0045] of Millikan purportedly discloses "updating the address information in the control block to reflect the first write address". This is respectfully traversed. The quoted passage of Millikan discloses ""(...) the user can use input controls to cause the CPU transmit the listing of the various sorting criteria from the vector sort table to the display, Once displayed, via controls, the user can select one of the sorting criterion and the audio files will be played in the order corresponding to the selected sorting criterion. if the selected sorting criterion includes file names, then the player's CPU simply plays the files in the order specified using the file names". With other words, the quoted passage of Millikan relates to "using input controls", "caus[ing] the CPU [to] transmit the listing (...) to the display", "select[ing] one of the sorting criterion", and "play[ing] the audio files". None of these is related to notions of "address information", "control block", "write address" as expressed in the purportedly related claim 3 elements.
- [0039] of Millikan purportedly discloses "obtaining a second write address information indicating the segment within the control area to which a control block was last written; forwarding, as part of ensuring distributed write, the second write address information so that it indicates a next segment within the control area which contains unused space; writing the updated control block to the segment as indicated by the second write address information". This is respectfully traversed. The quoted passage of Millikan discloses "The CPU preferably creates the metadata presort file before or while burning a CD and stores the presort file on the CD at a predetermined location along with the compressed audio files. As will be explained in detail below, the audio files on the CD then can be played in the order associated with any of the presorted segments without a player having to sort the audio files while the user waits. That is, the audio files have

already been sorted and the player uses the presorted file information to permit a user to efficiently sort through and play the audio files in a desired order. In addition to the presort file and the various audio files, "file system" information is also assembled and stored on the disk during the burn process at a predetermined location. The file system information is commonly found on MP3 disks. The file system information contains standardized information regarding each audio file on the CD. Such information includes a name (e.g., name of a song, name of file), total size of the file (i.e., number of bytes), and the starting address of the file on the CD. Other information may included as part of the file system information as well. The file system information preferably is stored on the CD at a predetermined standard location and extracted from the disk after the disk is inserted into a player". With other words, the quoted passage of Millikan relates to "creating a presort file before burning a CD", "storing the presort file on the CD", "playing audio files", "sorting through and playing audio files", and "assembling and storing file system information during the burn process". None of these is related to notions of "second write address", "control area", "write pointer" (indication of that segment to which a control block was last written), or "writing an updated control block" as expressed in the purportedly related claim 3 elements.

Rejection to Claim 4

- [0030] of Millikan purportedly discloses "marking, in the read control blocks, the payload data record to be deleted as deleted, thereby obtaining a modified control block". This is respectfully traversed. The quoted passage of Millikan discloses "(...) the presort file is created using a personal computer. The computer burns a CD with a plurality of audio files and also the metadata presort file. Once burned, the CD can then be played using a suitable player. FIG. 2 shows a computer system which can be used to create the presort file and burn a CD. As shown, the computer system comprises a processor unit coupled to a display, a keyboard, a mouse and a CD burner. As is well known, an operator controls the computer using the keyboard and/or mouse and display. The CD burner accepts a CD via a slot or tray. The burner accepts data from the processor unit to format and write to the CD. CD burners are well known in the

art.". With other words, the quoted passage of Millikan relates to "creating a presort file", "burning a CD", "playing a CD", and to a "computer system" and constituent parts thereof. None of these is related to notions of "marking payload data records", or "modified control block", as expressed in the purportedly related claim 4 elements.

- Fig 4 and [0034] of Millikan purportedly disclose "obtaining a write address information indicating the segment within the control area to which a control block was last written; forwarding, as part of ensuring distributed write, the write address information so that it indicates a next segment within the control area which contains unused space; writing the modified control block to the segment as indicated by the forwarded write address information". This is respectfully traversed. The quoted passage of Millikan discloses "One suitable format for the metadata presort file is shown in FIG. 4. As shown, the preferred presort file comprises a vector sort table and one or more presort segments. The presort segments comprise information the CPU extracts taken from the audio files' metadata. Each presort segment corresponds to a sorting criteria which may vary between presort segments. Each presort segment contains information that is indicative of a particular order for the audio files. Exemplary sorting criteria include, without limitation". Fig 4 of Millikan discloses "a metadata presort file used by the player to sort audio files" (see [0024]). With other words, the quoted passage of Millikan relates to structural details of a data structure. As such they are in no way related to method steps of "obtaining a write address information", "forwarding a write address information", or "writing the modified control block" as expressed in the purportedly related claim 4 elements.

Rejection to Claim 5

- [0009] and [0013] of Millikan purportedly disclose "a method wherein the size of the segments corresponds to an integer multiple of the size of sectors or ECC blocks as defined in a physical format on the storage medium". This is respectfully traversed. The quoted passage of Millikan discloses "More recently, compressed audio technology has increased in popularity. An audio compression standard that has become widely used

was promulgated by the Motion Picture Experts Group ("MPEG"). This group has introduced a variety of standards for compressing video and associated audio. Of these various standards the MPEG-1/2 Layer-3 standard ("MP3") has become widely used for compressing audio data for use in consumer products. Application of the MP3 standard can result in a compression ratio of 10:1 or greater. That is, with a 10:1 compression ratio ten times more information can be stored on a CD having the same capacity as with the conventional audio CDs for which the data is not compressed. With MP3 technology, a user can copy compressed audio files to a CD (a process typically referred to as "burning" the CD) and then play the audio files via an MP3-compliant player. The MP3 player retrieves a compressed file from the disk, decompresses the file, and plays the file through speakers or headphones connected to the player. Some MP3 players decompress and play audio stored on a CD as noted above, while other MP3 players decompress and play audio stored in solid state memory in the player. In the latter type of player, the user downloads MP3-compressed audio files directly into the MP3 player's memory." [0009] and "In a standard computer time and amount of memory are not generally limiting factors. Standard personal computers typically include state of the art microprocessors operating at gigahertz or faster clock rates and large amounts of RAM (e.g., 128 megabytes). In a portable MP3 player, however, processing time and memory can indeed be limiting. The performance of a portable player is generally constrained by cost which generally means that the portable device has a slower microprocessor and much less memory than a desktop computer. Further, for MP3 players that can read audio files from a CD, it takes a significant amount of time for the player to move the laser beam to the correct spot on the disk to access a particular file. This time can be on the order of a few seconds. Thus, it would take an annoyingly long period of time for a portable player to access and sort through the metadata of hundreds of audio files stored on the CD. For these reasons and others, portable MP3 players generally do not provide the user the ability to sort through the files contained in the player. Instead, the user interface is limited to simply scrolling sequentially through the titles one at a time" [0013]. Except merely containing the word "standard", the quoted passages are in no way related to, let alone anticipate concepts of "segments" or "sectors", or their sizes being in any way related to each other.

Rejection to Claim 6

- Fig 4, element 86 of Millikan purportedly discloses "a method wherein the segments are allocated on the storage medium to be sector or ECC block aligned". This is respectfully traversed. Element 86 of Fig 4 is a "presort file", see [0032, 0034], hence a data structure. Millikan's teachings, being, as explained above, agnostic about concepts of segment or sector, or ECC block, are in no way related to concepts of memory alignment of any of these units relative to any other, as expressed in the purportedly related claim 6 elements.

Rejection to Claim 7

- [0046] of Millikan purportedly discloses a "method wherein the indicating is realized by attaching to a data record to be written a version count value which is incremented and taken modulo a predefined upper bound upon each writing, the version count getting written to the database file as part of the data record being written thereto". This is respectfully traversed. The quoted passage of Millikan discloses "If, however, the selected sorting criterion includes a proxy value instead of a file name, the CPU preferably converts or matches the proxy value to a corresponding file name by applying the same algorithm described above used by system to generate the proxy values in the first place. The CPU retrieves the file system information from the CD, decodes and decompresses the file system information if necessary, and stores the file system information in the player's memory for subsequent use in playing the CD. The file system information, which contains the file names, contains, or permits the CPU to recreate, the directory and file information used by system to assign the proxy values as explained previously. By using the same algorithm as was used by system to create the proxy values, the player can accurately match the proxy values to the file names. This process of converting or matching proxy values to file names can be done during an initialization process as the CD is inserted into the player or at other suitable times.". With other words, the quoted passage of Millikan relates to "converting proxy values to

file names", "retrieving file system information", "decoding and decompressing file system information", "storing file system information", and "recreating directory and file information". None of these is related in any way to notions of "data record to be written", "version count value", "incrementing a version count value", or "writing the version count as part of the data record being written", as expressed in the purportedly related claim 7 elements.

Rejection to Claim 8

- [0040] of Millikan purportedly discloses "a method wherein the size of the at least one area is chosen such that the average wear of the segments is equal". This is respectfully traversed. The quoted passage of Millikan discloses "Instead of storing the names of the audio files as part of each entry in the presort segments, a "proxy" value can be used in its place. One embodiment of a proxy value is a one or two byte number. Each unique proxy value corresponds to an audio file. As a one byte number, the range of proxy values is large enough to correspond to 256 audio files. If the ability to accommodate more than 256 files is desired, then the proxy value can be expanded by an additional byte or bytes as is needed. Proxy values, which generally require fewer bits of storage than file names, may be preferred to reduce the demand for disk and player memory capacity.". With other words, the quoted passage of Millikan relates to "disk demand", and "memory capacity", but not to a notion of "wear"; as expressed in the purportedly related claim 8 elements, and as defined at least in (page/line) (1/14-20), (2/13-16), (4/3-6), (4/13-24), and (7/3-6). In this, "wear" stands for sector degradation due to limited rewritability of the rewritable medium considered in our application, see at least (1/16-19).

Having fully addressed the Examiner's rejections, it is believed that, in view of the preceding amendments and remarks, this application stands in condition for allowance. Accordingly then, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the

Serial No. 10/564,399

PD030079

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Examiner is invited to contact the applicant's attorney at the phone number below, so that a mutually convenient date and time for a telephonic interview may be scheduled.

Respectfully submitted,

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February 27, 2009